REMARKS

Claims 1-47 are currently pending in the present application. Claims 1, 9 and 11 have been amended in the expectation that the amendments will place this application in condition for allowance. The amendments do not introduce new matter within the meaning of 35 U.S.C. § 132. Accordingly, entry of the amendments is respectfully requested.

1. Rejection of Claims 1-10 under 35 U.S.C. § 112, 2nd paragraph

The Official Action states that claims 1-10 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As the basis of this rejection, the Official Action states:

> Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
> Regarding claim 9, the phrase "such as" in lines 2 and 3 renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP 2173.05(d).
> It is suggested that the phrase "such as" be either positively recited or deleted. Appropriate correction is required.

With regards to claim 9, applicants have amended claim 9, resulting in the deletion of the phrase "such as" as suggested by the Examiner. Preferred basic compounds have been listed in new claims 45-47.

With regards to claims 1-8 and 10, applicants respectfully

traverse this rejection. Regarding the §112, second paragraph rejection, caselaw has defined two requirements under the statute: (1) whether the applicant has stated the invention as something elsewhere in the application which would not fall under the scope of the claims; and (2) whether the claims would be communicated with a reasonable degree of particularity and distinctness to a person skilled in the art in light of the content of the disclosure and the teachings of the prior art. MPEP §2171, §2173, and §2173.02.

Although the Official Action states that claims 1-10 have been rejected under 35 USC 112, 2nd paragraph, the Examiner has given as a basis for this rejection a feature of claim 9, which has been amended as suggested by the Examiner. However, the Examiner has provided applicants with no particular basis for the rejection of claims 1-8 and 10 and no particular reason why claims 1-8 and 10 are "indefinite".

Accordingly, applicants respectfully request the Examiner to reconsider and withdraw the rejection of pending claims 1-10.

2. Rejection of Claim 10 under 35 U.S.C. § 102(e)

The Official Action states that claims 1-7 and 9-20 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Akiyama et al. (U.S. Patent No. 5,948,773) for the following reasons:

Akiyama discloses a pharmaceutical formulation comprising

> an antibacterial substance and/or an anti-ulcer substance, in that the anti-ulcer substance is a proton pump inhibitor, wherein at least either one of them is formulated into a gastrointestinal mucosa-adherent solid preparation, which comprises a matrix containing a combination mixture of fatty acid esters, lipids and viscogenic agents, whereby lipids include saturated fatty acids or salts thereof, higher alcohols–cetyl alcohol, stearyl alcohol, fatty acid glycerol esters (mono-, di- or triglycerides), waxes, hydrocarbons- paraffin, microcrystalline wax and phospholipids) in combination with pharmaceutically acceptable excipients (see reference column 2, line 16 through col. 3, line 67); (col. 9, line 20 through col. 13, line 59).

Applicants respectfully traverse this rejection. The test for anticipation is whether each and every element as set forth is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP § 2131. The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP § 2131. The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

The presently claimed invention relates to specific combinations of administration forms for acid-labile active compounds; namely, a fatty alcohol and a solid paraffin, as listed in claim 1, or a fatty acid ester and a solid paraffin or a triglyceride and a solid paraffin, both listed in claim 2.

In contrast, Akiyama relates to a gastrointestinal mucosa-

adherent solid preparation, which adheres to a particular site in the gastrointestinal tract. In particular, Akiyama discloses that the preparation contains polyglycerin fatty acid esters and preferably such polyglycerin fatty acid esters or lipids in combination with a viscogenic agent. The viscogenic agent is said to become viscous and adherent to the gastrointestinal tract mucosa upon exposure to water. The lipids disclosed by Akiyama comprise a myriad of different types of lipids and no specific combination is disclosed. In fact, only behenic acid hexa(tetra)glyceride (polyglycerin fatty acid ester) in combination with poly(acrylic acid), the viscogenic agent, is given as an example.

Further, present claims 16 through 20 are drawn to a specific process for the production of an active compound unit in the form of a microsphere comprising an acid-labile compound. In contrast, the methods of preparation according to Akiyama are disclosed in column 16, line 37 through 49 and Examples and do not recite the steps of the presently pending claims.

Thus, Akiyama fail to teach and every element of the presently claimed invention as required by *Verdegaal Bros. v. Union Oil Co. of California* and therefore fails the test for anticipation under 35 U.S.C. §102(e).

Accordingly, applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 1-7 and 9-20.

3. Rejection of claim 8 under 35 U.S.C. § 103(a)

The Official Action states that claim 8 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Akiyama et al. in view of Linder et al. In particular, the Official Action states the following:

> Akiyama , as discussed above, teaches a pharmaceutical formulation comprising an antibacterial substance and/or an anti-ulcer substance, in that the anti-ulcer substance is a proton pump inhibitor, wherein at least either one of them is formulated into a gastrointestinal mucosa-adherent solid preparation, which comprises a matrix containing a combination mixture of fatty acid esters, lipids and viscogenic agents, whereby lipids include saturated fatty acids or salts thereof, higher alcohols—cetyl alcohol, stearyl alcohol, fatty acid glycerol esters (mono-, di- or triglycerides), waxes, hydrocarbons- paraffin, microcrystalline wax and phospholipids) in combination with pharmaceutically acceptable excipients (see reference column 2, line 16 through col. 3, line 67); (col. 9, line 20 through col. 13, line 59).
>
> The anti-ulcer substance includes H2 blockers and proton pump inhibitors, wherein proton pump inhibitors are preferred. The proton pump inhibitors include benzimidazole compounds such as lansoprazole, timoprazole, omeprazole and pantoprazole, for example (col. 3, lines 55-67; col. 9, lines 20-34). The salt of a benzimadole compound is preferably used as a physiologically acceptable salt. Physiologically acceptable salts include salts with inorganic bases, salts with organic bases and salts with basic amino acids (col. 9, lines 39-49).
>
> The formulation of the invention is used as (1) a combination of an anti-ulcer substance and a gastrointestinal mucosa-adherent solid preparation containing an antibacterial substance, (2) a combination of an antibacterial substance and a gastrointestinal mucosa-adherent solid preparation containing an anti-ulcer substance, (3) a gastrointestinal mucosa-adherent solid preparation containing both an antibacterial

substance and an anti-ulcer substance, or (4) a combination of a gastrointestinal mucosa-adherent solid preparation containing an antibacterial substance and a gastrointestinal mucosa adherent solid preparation containing an anti-ulcer substance. The combination of an anti-ulcer substance and a gastrointestinal mucosa-adherent solid preparation containing an antibacterial substance is preferred (col. 9, lines 53-67).

Akiyama teaches that the matrix containing a polyglycerol fatty acid ester may also incorporate a lipid. The lipid is a water-soluble substance that serves to control the dissolution rate of active ingredients, exemplified by the previously mentioned lipids (col. 13, lines 12-16).

The solid preparation may incorporate additives that include excipients, such as lactose, corn starch, talc, crystalline cellulose; binders, such as sucrose, methyl cellulose, polyvinylpyrrolidone, etc.; disintegrating agents, wetting agents, stabilizers and the like (col. 13, lines 28-52).

Example compositions for oral administration include tablets, pills, granules, powders, capsules, syrups, emulsions, and suspensions. These compositions are produced by known methods, using lactose, starch, sucrose, magnesium stearate and other substances as carriers or excipients (col. 17, lines 25-29).

Akiyama teaches the inclusion of lipids in the formulation, but is deficient only in the sense that he does not explicitly teach the selected sterols in the formulation.

Linder teaches an administration form comprising acid-labile proton pump inhibitors comprising the use of at least one sterol, whereby suitable sterols include phytosterols, such as ergosterol, stigmasterol, sitosterol, brassicasterol and campesterol and zoosterols, such as cholesterol and lanosterol or mixtures thereof.

Therefore it would have been obvious to one or ordinary skill in the art at the time of the invention was made to use the teachings of Linder within the teachings of Akiyama because Linder explicitly teaches that various sterols can be used in the proton pump inhibiting

> composition and Akiyama teaches also various lipids can be formulated in the anti-ulcer composition. The expected result would be an improved proton pump inhibiting composition for the effective treatment of a disease, as similarly desired by applicant.

Applicants respectfully traverse the rejection of claim 8. The references of record do not teach or suggest applicants' inventive subject matter as a whole as recited in the claim. The Examiner has failed to establish a *prima facie* case of obviousness against the presently rejected claim.

To establish a *prima facie* case of obviousness, the PTO must satisfy three requirements. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *Amgen Inc. v. Chugai Pharm. Co.*, 18 USPQ2d 1016, 1023 (Fed. Cir. 1991). Lastly, the prior art references must teach or suggest all the limitations of the claims. *In re Wilson*, 165 USPQ 494, 496 (C.C.P.A. 1970).

The presently claimed invention relates to a specific administration form for acid-labile active compounds comprising

pharmaceutical excipients and multiple individual active compound units in a matrix comprising at least one fatty alcohol, at least one solid paraffin, and further comprising one or more excipients selected from the group consisting of polymers, sterols and basic compounds, wherein the sterol is selected from the group consisting of ergosterol, stigmasterol, sitosterol, brassicasterol, campesterol, cholesterol and lanosterol or wherein the sterol is mixtures thereof.

In contrast, Akiyama relates to a gastrointestinal mucosa-adherent solid preparation, which adheres to a particular site in the gastrointestinal tract. In particular, Akiyama discloses that the preparation contains polyglycerin fatty acid esters and preferably such polyglycerin fatty acid esters or lipids in combination with a viscogenic agent. The viscogenic agent is said to become viscous and adherent to the gastrointestinal tract mucosa upon exposure to water. The lipids disclosed by Akiyama comprise a myriad of different types of lipids and no specific combination is disclosed. In fact, only behenic acid hexa(tetra)glyceride (polyglycerin fatty acid ester) in combination with poly(acrylic acid), the viscogenic agent, is given as an example.

Thus, Akiyama fails to teach all the limitations of the claimed invention as required by *In re Wilson*.

Linder does not remedy these deficiencies. While Linder teaches a novel administration form for acid-labile active

compounds, it does not teach an administration form for acid-labile active compounds comprising pharmaceutical excipients and multiple individual active compound units in a matrix comprising at least one fatty alcohol and at least one solid paraffin.

Thus, the references of record fail to teach or suggest all the limitations of the claims of the present invention as required by *In re Wilson*.

Accordingly, applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 8.

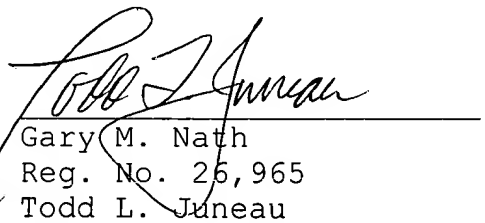
CONCLUSION

Based upon the above remarks, the presently claimed subject matter is believed to be novel and patentably distinguishable over the prior art of record. The Examiner is therefore respectfully requested to reconsider and withdraw the rejections of pending claims 1-20. Favorable action with an early allowance of the claims pending in this application is earnestly solicited.

The Examiner is welcomed to telephone the undersigned attorney if she has any questions or comments.

Respectfully submitted,

NATH & ASSOCIATES PLLC



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Date: June 11, 2003

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